



Volume 19 No. 5

May, 1968

AIRPORT MANAGERS HOLD TENTH ANNUAL MEETING

by: James A. Monger

The Yogo Inn in Lewistown, Montana was the Convention site for the Tenth Annual Meeting of the Montana Airport Management Association. The MAMA meeting started with the Honorable Walter Mondale, Mayor of Lewistown, giving a welcome address. The meeting was conducted by President Art Korn of the Silver Bow County Airport at Butte. The first panel discussion consisted of Mr. Dennis Hefring, President of Central Western Air Freight Limited, in Edmonton, Alberta, and Mr. Kenneth Stemler, Director of Cargo and Sales, Frontier Airlines, Denver. Each participant spoke briefly on the future of air freight in Montana. Both later answered questions from the floor. The group was extremely interested in Mr. Stemler's comments on the economy of air freight and cargo in Montana. Mr. Hefring held the audience's attention when he spoke of shipping fresh horse meat from Edmonton to France via air freight. The Montana Lumber and Hardware Company of Lewistown sponsored morning and afternoon coffee breaks and the Steffick Equipment Company of Helena sponsored the noon luncheon.



Dennis Hefring, President of Central Air Freight of Edmonton during presentation on the morning panel.

The next speaker was Mr. George Brewer, Director of Market Research for the Cessna Aircraft Company of Wichita, Kansas. Mr. Brewer's comments were primarily concerned with the gross national product in the economy of the nation and especially how it would affect the aircraft industry and more especially how the shorter work week will cause people to turn to recreation and utilize the airplane for recreational trips. The second panel discussion spoke on "How to Sell an Airport Bond Issue". Mr. James C. Taylor, Chairman of the Transporta-

tion Committee of Bozeman Chamber of Commerce gave an informative talk on a method of educating the public regarding airport bond issues. Also speaking on related issues was Mr. Ed Nurse of the Transportation Committee of the Helena Chamber of Commerce.

The luncheon speaker traveled from Los Angeles to tell the group of airport liabilities and airport insurance. The speaker was Mr. Harris Goodrich, a special representative of the United States Aircraft Insurance group. The afternoon session started with a comment from Charles Lynch, Director, Montana Aeronautics Commission, regarding the Moss Bill and its dangers. The third panel discussion then concerned itself with Montana and the third level carrier. Panel members were Mr. Chet Johnson, President, Commute Air of Spokane, Charles Lynch, Director, MAC, and Floyd Creasman, Airport Director of Spokane International Airport. The final presentation was made by Mr. Enoch Anderson, Chief, Airports Branch, FAA, Minneapolis Area Office, assisted by Vic Kiesling, Chief, Airport District Office, from Helena. Mr. Anderson spoke on "What Federal Air Regulation Part 77 Means to Your Airport". He enlightened the airport management group on the

continued on page 10

**Official Monthly Publication
of the
MONTANA AERONAUTICS
COMMISSION**

**Box 1698
Helena, Montana**

**Tim Babcock, Governor
Charles A. Lynch, Director**

**Jack R. Hughes, Chairman
E. B. (Ted) Cogswell,
Vice Chairman
Clarence R. Anthony, Secretary
Carl (Bill) Bell, Member
Gordon R. Hickman, Member
Walter Hope, Member
Robert H. Howe, Member**



Director's Column



MONTANA COMMUNITIES APPEAL FOR BETTER AIR SERVICE

Col. John Dregge, director of Community and congressional relations for the Civil Air Board met in Helena on April 16 with representatives of the communities in northern and northeast Montana; Bozeman; Western, Frontier, Northwest and Air West Airlines, and Combs Air Taxi of Billings.

The communities were appealing for better air service into Helena.

They stated that some rescheduling of existing flights, use of reduced fares in "isolation" cases and additional employment of feeder line use employing smaller aircraft would help the transportation picture in the state's smaller communities.

Dregge pointed out that he was not an examiner and had no decision-making powers and that "The purpose of meetings such as this is to try to get the communities and the air carriers together to discuss mutual problems and arrive at a better understanding of these problems."

Several of the speakers from the High Line emphasized they felt de-

teriorating surface transportation will result in far heavier use of air service in the future. They also were concerned with such service that would provide direct flights to Great Falls, Billings and Helena in order that business trips might be made in one day from these smaller communities "particularly to our capital in Helena".

At least two speakers pointed out that presently to fly from northeast Montana to Helena to transact business, three days are required, usually with a layover in Great Falls.

WOLF POINT

Harvey Bryan stated, "It's a long way to Helena and we think that in this day and age Montana can be serviced better than this." Bryan said the "isolation factor" was important to northeastern Montana because of sparse population but need for transportation connections exists, not only with the three cities listed, but also places where Montana University System units are located. The difficulty is worse in the winter, he added.

Lyman Clayton, chairman of the county airport board, said it is 320 car miles from that community to Billings "but it is 212 air miles actually, but much longer by the present service which does not fly directly between the points."

HELENA

Joe Flynn, chairman of the City/County Airport Board speaking for the airport board, the Helena Chamber of Commerce and the city/county governments said, "that there still exists a problem of persons wishing to travel between Great Falls and Helena, to be able to travel to Helena, conduct their business and return the same day" and that "between eastern Montana communities and Helena the problem today is a problem of co-ordination of schedules so that persons using the present carriers can make interline connections without long layovers being necessary."

"It is highly necessary, that there be speedy air connections between Helena and the High Line communities and the eastern Montana communities."

He cited the fact that Helena is the capital and houses "not only the legislative bodies but also the various active boards and commissions along with the Supreme Court." He added Helena is headquarters for many non-

government boards "who must always be in close contact with the various governmental boards and commissions."

GLASGOW

Mitch Etchart, chairman of the Chamber of Commerce aviation committee, pleaded for service so that "we can commute to the metropolitan areas in the morning and return home in the evening."

HAVRE

Walter Hensley, Havre, testified that his town "wants an early morning flight to Great Falls, with a return in the evening."

KALISPELL

Clark Mason, manager of the Kalispell Chamber of Commerce said basic needs now in that area are "direct north and south flights."

BOZEMAN

Jim Taylor, chairman of the Chamber of Commerce transportation committee, listed four points of need in that community:

1. Improved service between Chicago and Bozeman, eliminating a three-hour layover in Billings;
2. Direct service from Bozeman to the Seattle-Portland area;
3. One-carrier service from Bozeman to California, and
4. Additional summer flights into Bozeman from the East and Midwest to accommodate recreation-minded visitors.

DREGGE REPLIES

Following is a letter received by Mr. Carl W. "Bill" Bell, aviation committee of the Glasgow Chamber of Commerce and Aeronautics Commission member, received from Col. Dregge of the Civil Aeronautics Board. The letter is reporting on several suggestions and possible solutions to the problems presented at the Helena meeting.

April 23, 1968

Mr. Carl W. Bell
Aviation Committee
Glasgow Chamber of Commerce
Box 832
Glasgow, Montana

Dear Bill:

I do want to express my appreciation to you for your splendid arrangements surrounding our meeting with the Montana cities that was held in Helena last Tuesday, April 16. It seemed to me that we had a very interesting meeting and that the communities had an adequate opportu-

ity to present their problems. The air carriers' response was encouraging.

Mr. William Beeks of Air West stated that there is a possibility of instituting the second round trip over the High Line during the summer. Mr. Skelton of Great Falls suggested that West Coast had not been as aggressive as they might have been in promoting service to Great Falls. Mr. Beeks stated that they would certainly take this into consideration.

Mr. Vern Carlson of Frontier Airlines pointed out that they agreed that two round trips are needed daily over the High Line communities but that the load factor has not been sufficiently favorable to warrant the installation of the second round trip. However, they are considering the possibility of a small plane operation and they hope there will be developments in this field within the near future.

Mr. Campion of Northwest pointed out that they are obtaining 44 new jets in 1968 of which 28% will be Boeing 727's. They have already instituted better direct service to Helena and Missoula, Montana, and they look for further improvements with the acquisition of the additional aircraft.

Mr. Neil Stuart of Western Air Lines stated that Western would extend a DC-6 flight on April 28 from Idaho Falls to Helena; that on July 19 this DC-6 would be replaced by an Electra and extended to Great Falls. In the fall, all of the Electra equipment will be replaced with Boeing 737's. Mr. Stuart also stated that on April 28 Great Falls would get a nonstop operation to Denver and that this would necessitate cutting back Billings service from four schedules to three. He further mentioned that Western would be willing to talk to Frontier about connections at Great Falls.

I believe the above reviews the statements of the air carriers and you can rest assured that we are interested in improved service to Montana. We shall keep in touch with the situation.

Sincerely,
John W. Dregge
Director, Community and
Congressional Relations

LLOYD TRAVIS FETED AT RETIREMENT DINNER

On April 10, 1968 Lloyd Travis, Chief of the Miles City FAA Flight Service Station, completed 41 years of government service, 25 years as Station chief.

A No-Host Dinner was held on March 31st at the Red Rock Village in Miles City to honor Lloyd, organized by the local MPA Hangar. Over 100 persons attended the occasion including FAA personnel and pilot friends from throughout Montana.



A smiling Mr. and Mrs. Travis shown with a few of the many gifts. Standing, Howard Wilson, Master of Ceremonies.

Mr. Robert O. Ziegler, manager of the FAA's Central Region Area Office in Minneapolis, presented Lloyd with a large retirement plaque. Mr. Ken Rudolph, president of the Miles City MPA Hangar made the presentation of the association's plaque. Local FAA personnel gave Lloyd a 35MM camera and the other guests completed the ensemble with a slide projector, slides, screen, flash attachment and film. In addition, Lloyd received a hand tooled leather folder containing the personal letters from his many friends and associates including best wishes from Governor Babcock, the Aeronautics Commission and numerous individuals.

Following a brief address by Mr. James P. Lucas the program was completed with Mrs. Travis receiving a beautiful bouquet of red roses.

We have all enjoyed the cooperation and many services provided to Montana aviation by Lloyd Travis over the past 25 years and wish him many happy years of retirement.

TWO NATIONAL WINNERS OF AVIATION MECHANIC AWARD ARE ANNOUNCED

L. Dean Webster of Sunnyvale, Calif., is the winner of the Fifth Annual Aviation Mechanic Safety Award in the air carrier class, and Robert M. Garmon of Des Moines, Iowa, the general aviation winner.

They were selected from a group of 18 semi-finalists representing FAA's eight regions following a nation wide competition of aviation mechanics nominated for their outstanding contributions to aviation safety during 1967. Selection of the national winners was made by a nine-member panel of key aviation executives and the Flight Safety Foundation acted as the panel coordinator.

On May 28th FAA Administrator William F. McKee presented Mr. Webster and Mr. Garmon with specially designed medallions and \$500 cash awards during a ceremony in Washington, D. C.

Webster was cited for development of an improved inspection procedure for the Pratt & Whitney JT8D turbine engine utilizing a 10,000 candlepower Iota Cam light source and a flexible fiberoptic light rod and cystoscope (internal viewing device). This procedure permits earlier detection of internal malfunctions than was previously possible without disassembly of the engine.

This innovation won Webster not only the FAA safety award, but also the largest cash suggestion award ever paid by United Air Lines. He has worked for United for 21 years in every phase of engine overhaul.

Garmon was honored for developing a procedure for performing altimeter and static system tests using a portable tester with a calibrated altimeter. He assured its accuracy by employing Weather Bureau barometric pressure readings and a bench mark (known elevation) which he established within the Des Moines Flying Service hangar.

The Des Moines Flying Service subsequently became the first repair station in Iowa to be granted the specialized servicing rating for testing both altimeter and static systems on aircraft. Since that time Garmon has helped many other mechanics to duplicate his test procedures.

AIRPORT NOTES



By James H. Monger
Assistant Director, Airports

Libby — The Brezina Construction Company of Salt Lake has started work on the new airport for Libby. This is a local, State and Federal aid project with the Montana Aeronautics Commission participating financially through a \$1,000 preliminary engineering grant and a \$10,000 airport improvement loan repayable at 3½% interest over a ten year period.

Bozeman — Bids were opened in Bozeman on April 18th for the airport improvement project at Gallatin Field. The apparent low bidder was Maronick Construction Company of East Helena, with a total bid of \$408,823. Other bidders were Peter Kiewit of Billings at \$417,985; Northwest Engineering of Rapid City, So. Dakota at \$422,406; and Schultz & Lindsay of Billings at \$480,065. The electrical bid went to Midland Electric at \$18,844. Other bidders were Cascade Electric of Great Falls at \$19,828; Allen Electric of Helena at \$22,800; F. L. Dye Company of Bozeman at \$31,530; and Bozeman Electric at \$33,193. Work on this project is to start immediately with a completion date of August 15th.

FAAP Program Announced — On April 25th the Federal Aviation Administration announced their Fiscal Year 1969 Federal Aid to Airport Program for Montana. The total allocation to Montana is \$1,791,908. This is approximately 53% of the total cost of eligible airport improvements. The local Airport Boards will have to match this money and in most cases, put two or three times the amount for other items. The program is as follows: Billings, \$261,039; reconstruct runways, taxiways; Helena, \$570,860, purchase land, improve lighting, extend runway and overlay taxiways and runways; Kalispell, \$241,185, land acquisition and runway extension; Missoula, \$657,312, land acquisition, lighting improvements and runway extension; Philipsburg, \$61,512, construct new

airport consisting of a paved runway 3600 feet by 60 feet, along with an aircraft parking apron and taxiway.

FAA Turn Downs — Great Falls did not receive an allocation from the FAA for a taxiway and a visual approach slope indicator.

East Glacier — The Aeronautics Commission did not receive approval for a request for Federal aid for an airport study for land acquisition and airport design at East Glacier.

HYSHAM AIRPORT DEDICATION

Sunday, May 26th is the Dedication Day for the new general aviation utility airport at Hysham in Treasure County. Mr. Bill Skipper of Colorado will do stunt flying in his Aeronca Citabria. The day of events will start at 11:00 a.m. at a church service with Reverend Allan presiding at the Hysham Presbyterian Church. The local High School band will present a concert from noon until 1:00 p.m. At 1:00 p.m. a lunch will be served. At 1:30 p.m. Air Force jets will present a fly-over from the Billings Air Dispersal Base at Logan Field. The stunt flying performance will commence immediately after the jet fly-over. Dignitaries will then speak and officially dedicate the airport at 1:45. There will be representatives from the City of Hysham; Treasure County and the Aeronautics Commission. Governor Babcock has been invited to address the group.

A limited number of tie down stakes will be furnished by the Aeronautics Commission and a Unicom Advisory Radio will be available. Other events and activities are planned during the dedication by the Town of Hysham.

NORTH DAKOTA TO HOLD FLY-IN FISH DERBY

On June 21-23—Fly-in fish derby and spot landing contest, Hankins Field, Parshall, North Dakota. Trophies for biggest walleyes and north-erns and prizes for spot landing winners and the pilot coming the greatest distance. Displays of new planes; aerobatic show; contest awards presentation Sunday afternoon. Housing and boats provided. Contact John C. Rinehart, Box 582, Parshall, N. Dak., 58770; phone 701-862-6175.

GREAT FALLS COMMERCIAL AIR TRAFFIC, 1959 TO 1966



TAP INC.

The following article is an examination of the historic O & D traffic from Great Falls to other regions of the United States and within the State of Montana. The April 1968 issue included a similar analysis for Billings, Montana. It was clearly stressed in that article that Billings and Great Falls are the overwhelmingly most important air passenger markets in Montana. These two markets alone make up well over 50 percent of the traffic from Montana.

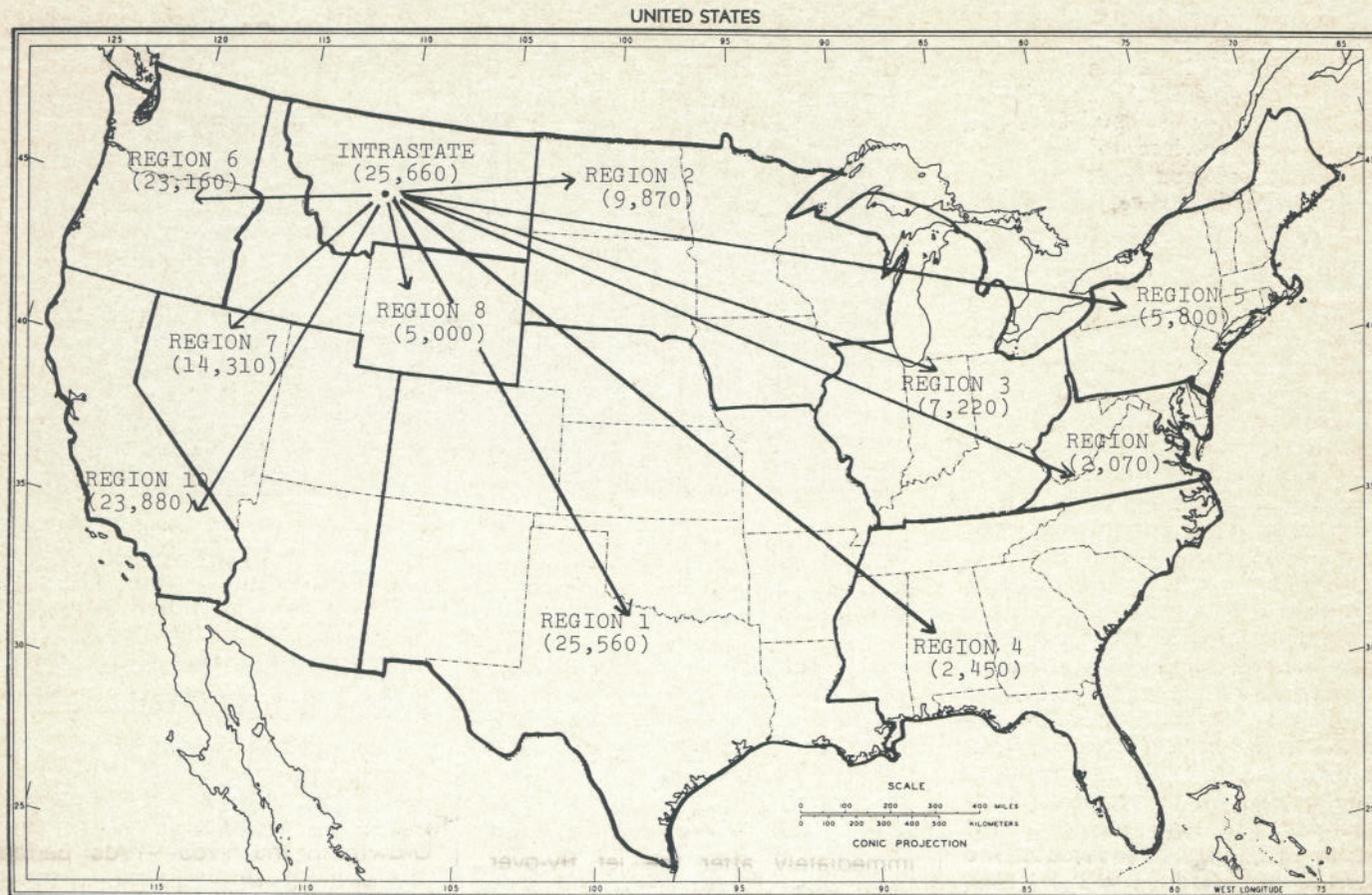
The total O & D traffic from Great Falls in 1966 amounted to 144,880 passengers. This made up approximately one-third of the total O & D traffic from the State of Montana and is very comparable to the total O & D traffic reported for Billings. The total growth in O & D traffic from Great Falls has been 91.9 percent in the time period 1961—1966. Growth in the 1965—1966 period was over 13 percent and over 15 percent in the 1964—1965 period.

An important factor in the analysis of the O & D traffic reported for Great Falls is the passengers who are reporting a portion of an international journey. All passengers who enter the United States through the customs station at Great Falls and continue on to other points in the United States are included as O & D passengers for Great Falls. The 1966 Civil Aeronautics Board O & D statistics indicate that nearly 18.5 percent of the total traffic of Great Falls were passengers completing or beginning a portion of an international journey. In other words, 26,780 of the total O & D passengers were passengers on a portion of an international journey.

The regional map included shows the breakdown of the total O & D traffic exchanged between Great Falls and each region of the United States for 1966. The passengers reported as completing a portion of an international journey are included.

An analysis of this map shows that the important markets to Great Falls are Regions 1, 6, 7, and 10 as well

GREAT FALLS ORIGIN AND DESTINATION TRAFFIC, INTRASTATE AND BY REGION, 1966.



as intrastate traffic. It should also be stressed that over 37 percent of the total traffic exchanged with Region 1 are passengers completing a portion of an international journey. This portion is not nearly as high for any other region as can be shown by the table enclosed which shows the percentage of total traffic for each region which is in fact made up of passengers completing part of an international journey.

It is extremely interesting to note that the regions in the eastern United States, including Regions 3, 4, 5, and 9, are of lesser importance than the regions to the immediate south and west. It is also interesting to note that Region 2 is of lesser importance to Great Falls than it is for Billings, while Regions 6, 7, and 10 are significantly more important for Great Falls than they are for Billings. We urge that such comparisons be made between these major markets for other areas by comparing the map included in this article with the one

in the April issue concerning Billings.

In conclusion one notes that Great Falls traffic is overwhelmingly oriented to the immediate south and west areas of Great Falls. It is also interesting to note that Great Falls does have a large intrastate traffic movement. The distant areas to the east coast and mid-west are generally of lesser importance for Great Falls than they are for Billings, with the reverse being true in the western areas.

Region	Total O & D Statistics	Part of Internat'l Journey	P'centage of Total O & D
1	25,560	9,520	37.25
2	9,870	840	8.57
3	7,220	800	11.08
4	2,450	170	6.94
5	5,800	710	12.24
6	23,160	1,400	6.04
7	14,310	4,020	28.09
8	5,000	570	11.40
9	2,070	70	3.38
10	23,880	7,430	31.11
Intrastate	25,660	1,250	4.87
	144,880	26,780	18.48

Source: C.A.B. Origin and Destination Statistics.

Compiled by Research Staff - TAP Inc., Lloyd C. Rixe and Wm. J. Ewa-siuk.

FEDERAL AVIATION ADMINISTRATION INTINERARY LISTING



Airport	May	June
Culbertson		5
Glasgow		8
Glendive		23
Great Falls		9
Lewistown		19
Miles City		26
Missoula		23
Sidney		22

NOTE: Provisions have been made to give private commercial and flight instructor and instrument written examinations, **ON AN APPOINTMENT BASIS ONLY** at the following FAA Flight Service Stations:

Bozeman	Lewistown
Butte	Livingston
Cut Bank	Miles City
Dillon	Missoula
	Great Falls

GF HANGAR'S MERCY FLIGHTS TO SAVE LIVES

In the fall of 1966 the members of the Montana Pilots Association Great Falls Hangar ("Cloud Busters") offered their services to the Montana Red Cross Blood Center in Great Falls. Since that date, 27 mercy flights have been made by the Cloud Busters. The members donate their services and their aircraft. The blood deliveries are made from the Blood Center to hospitals through the 46 participating Montana counties and three counties in North Dakota. All requests for blood are checked through the doctor in charge and every flight accomplished has been designated as "life saving".

The emergency flights deliveries are made when regular air service is not available or the usual means of sending emergency blood by the Highway Patrol would take too long.

Occasionally it may take several calls for all of the volunteers have full time occupations, they are optometrists, insurance men, lawyers, farmers, motel owners, ranchers and many others. However, there is always someone who makes himself and his aircraft available for a "Blood Flight".

In addition the Hangar is fortunate having the three local fixed base operators as members and they have "come through" on occasion with single or multiengine aircraft and a pilot for IFR weather when the need has arisen.

A recent flight which is an excellent example of the service this group is providing was a flight made by Bob Uglum which is credited for apparently saving the life of a small Bozeman girl. Delivery was of a rare blood derivative vaccine, vaccinia immune globulin (VIG). Great Falls is one of seven places in the nation where the VIG is stored and release of the VIG is controlled by a national advisory committee. Clearance for the Bozeman case was arranged through a Denver physician who is a member of that board. After clearance was obtained for the vaccine, Uglum was notified by the Red Cross at 7:40—he was in the air by 8:00 and at 9:00 the Red Cross officials were advised the VIG was at the hospital in Bozeman ready for use! The child was reported in good condition later that same evening.



Mercy Flights Participants. Left to right: Charlie Reiste, Brooks Robinson, Jack Palmquist, Loy Blackburn, Art Kussman (Red Cross Blood Center), Bob Uglum (seated in aircraft), Don Coombs and George Christensen. Participating pilots not shown in the picture are: Dr. James Payne, William Kidd, Don Bowman, Russell Walden and Bernard Gregoire.

Printed below is an excerpt of a letter from a doctor following receipt of an earlier shipment of blood from the Great Falls Center by the Cloud Busters emergency plane service.

"I wish to thank you and your staff for the prompt response to our urgent need for blood."

"The case involved was one of severe uncontrollable post partum hemorrhage and without the promptness of blood this patient would not have survived. It was a young mother with her first confinement and one of the unfortunate rare complications of obstetrics."

"There is no question in my mind but that the patient's life would have been lost without the prompt administration of blood and the administration had to be taken care of in a very short time."

"Again, our sincere thanks and appreciation to you and your staff."

The members of the Great Falls Hangar deserve the highest appreciation, praise and respect of all Montana for this service and General Aviation can be proud of their example.

COLUMBUS, MONTANA FLY IN AND AIR SHOW

MAY 19, 1968

Breakfast 9:00 AM — 11:00 AM

INTERESTED IN A SCENIC SUMMER VACATION SPOT?

The Idaho Department of Aeronautics is offering special services to all flying groups who are looking for scenic and recreational places to go this summer.

If you are seeking a flying vacation in one of the most scenic, untouched states in the nation—if you would like to vacation on airstrips scenically located and equipped with camping facilities for flyers only—send your inquiries to: Idaho Department of Aeronautics, 3103 Airport Way, Boise, Idaho 83705.

THUNDERBIRDS AND COLE BROTHERS SHOW SLATED FOR MISSOULA

This is Montanans opportunity to see the world famous U. S. Army aerobatic and maneuvers team, THE THUNDERBIRDS; Montana's aerobatic expert, Al Newby and the renowned COLE BROTHERS AIR SHOW.

May 30 (Memorial Day) — THE THUNDERBIRDS.

May 31—AL NEWBY's AEROBATIC DEMONSTRATION.

June 1—THE COLE BROTHERS AIR SHOW.

DON'T MISS AVIATION WEEK
IN MISSOULA
TAKE THE FAMILY

AVIATION EDUCATION HIGHLIGHTS



By C. R. "Ron" Adams
Supervisor of Aviation Education

Brenda Maas—Award Winner

At approximately 9:00 p.m. the evening of May 2, Miss Brenda Maas of Glasgow High School was the proud possessor of a Private Pilot Training Scholarship, her ticket to learn the thrill of being able to pilot an aircraft and earn the Private Pilot rating. This award, plus approximately thirty runnersup awards, were all made through the sponsorship of the Montana Aeronautics Commission.

In the February issue of the Newsletter I announced the inauguration of the Montana Youth in Aviation Award and outlined how it would be conducted. The finalists, eleven in number, were chosen on the basis of their score attained on the Phase I examination. They are, in essence, the top students in their aviation science classes. This honor has earned them the Solo Flight Scholarship in recognition of their achievement within their own school.

The eleven finalists represent eight Montana high schools. Each student is either currently enrolled in an aviation science class or has successfully completed their school's course in the subject area. The finalists were composed of ten young men and the young lady. I personally was very pleased to see a member of the fairer sex reach the finals. We almost had two other gals gain the finals, and but for the lack of two or three points, they would have made it.

Each of the finalists were flown to Helena for the finals competition. While in the Capital City they were the guests of the Montana Aeronautics Commission. Their stay here was not all work and examinations. We had a busy schedule, but we also included some activities that would be of interest personally and educationally for the finalists.

Appointments were made with the two people responsible for this program being established: Miss Harriet Miller, Superintendent of Public Instruction, and Mr. Charles A. Lynch, Director, Montana Aeronautics Commission, whom I'm sure most of you know.

Because of the educational aspect of all the aviation education programs going on throughout Montana schools, it was felt that, to be accepted and successful, we should have the support of the Department of Public Instruction. This has been our basis of implementing all aviation education programs for some nine years now, and has worked out quite well. Miss Miller, Montana's chief school official, not only believes aviation education has a place in our schools, but here is a woman that utilizes the airplane, both large and small, to meet her demanding schedule.

Chuck Lynch, as Director of the Montana Aeronautics Commission, is an advocate of aviation education at all levels. Without his support we would not have the necessary funds to conduct our many and varied programs of aviation education in Montana schools. It is the responsibility of the seven Commission members to approve expenditures and without Mr. Lynch's support, I'm sure we would not enjoy such a fruitful program like the Montana Youth in Aviation Award.

Before they departed for home, the finalists met with Governor Babcock, who is a pilot himself and a strong supporter of aviation programs at all levels. This was a rare opportunity for the young people to meet with their Governor.

The finalists and their schools were: Jim Houston, Red Lodge High School; William Evanson, Fairview High School; David Waag and Gary Sibert, Charles M. Russell High School, Great Falls; Brian Hay and Brenda Maas, Glasgow High School; Pat McNulty, Broadwater County High School, Townsend; Scott Dahmer and Dennis Sparrow, Great Falls High School; Robert Clarkson, Helena High School; and Terry Davidson, Cut Bank High School.

The only regret I have is that there is only one winner. In reviewing the applications I felt that any of the one hundred plus entries would be a deserving recipient of

this first annual award. Each student that entered is not only an outstanding student, but an outstanding young citizen as well.

See June issue for complete details and pictures of the Award Presentation.

FORMER COMMISSIONER CHOSEN TO HEAD WESTERN'S NEW PROGRAM

Herb Jungemann, former member of the Montana Aeronautics Commission (1961-1965), has been named manager of employee development in Western Airlines' Industrial Relations Department. He will organize and implement company wide programs to develop employees for various levels of responsibility.

Herb has been a Western Airlines employee for the past 23 years. He was station manager in Billings, Montana from 1958 until he transferred to Phoenix, Arizona in 1965. In 1966 Herb was transferred to the Los Angeles headquarters as procedures manager.

Herb is well remembered throughout Montana for his capable and active participation on the Commission in addition to his Western position and interest in civic affairs. He served as Chairman of the Commission for fiscal year 1963/64.

We all join in saying "Congratulations" on Herb's latest advancement and best wishes for the new program.

STATISTICS

Will your first accident be your last day alive?

61/37
65/22
78/18
69/18
18/2

ACCIDENT TOTAL FATALITIES

1964 Total	61	37
1965 Total	65	22
1966 Total	78	18
1967 Total	69	18
1968 Total	18	2

A new version of an old saying, "A picture window is worth 10,000 words to the neighbors."



CALENDAR

May 11, Calgary, Alberta, Canada—International Northwest Aviation Council Board Meeting.

May 15, West Yellowstone—Airport facilities open.

May 16, Helena—Montana Aeronautics Commission Monthly Meeting.

May 19, Columbus—Fly-In and Air Show. Breakfast served 9:00 a. m. to 11:00 a. m. Sponsored by the Jaycees.

May 19, Lincoln—Helena MPA Hangar Fly-In and Pot Luck Picnic.

May 19-23, Philadelphia, Penn.—American Association of Airport Executives Annual Convention.

May 25, West Yellowstone—Frontier commences scheduled service for the 1968 season.

May 26, Hysham—Airport Dedication. Activities commence at 12 Noon—Fly-In Lunch—Airshow—Band Concert. (See Article).

May 30-June 2, Missoula—General Aviation Week. May 30, the Thunderbirds; May 31, Al Newby Aerobatics; June 1, the Cole Brothers Air Show. A full weekend of static displays and exhibits.

June 1, West Yellowstone—Western commences scheduled service for the 1968 season.

June 2, West Yellowstone—Dillon MPA Hangar Annual Breakfast. Everyone welcome. (Rain Date June 9)

June 8 & 9, Culbertson—Fly-In held in conjunction with "Frontier Days." Free breakfast June 8 for all flying in.

June 10-28, Dillon—Western Montana College Aerospace Education Workshop.

June 11-July 3, Havre—Northern Montana College Aerospace Education Workshop.

June 14-16, Basin Harbor, Vermont—National Pilots Association Annual Summer Fly-In.

June 17-July 3, Billings—Eastern Montana College Aerospace Education Workshop.

June 21-23, Parshall, N. D.—Hankins Field. Fly-In Fish Derby—Trophies for largest Walleyes and Northerns and prizes for spot landings and

for the pilot coming the greatest distance.

June 23, Jordan—Garfield MPA Hangar Fly-In Breakfast 8:00 a. m.—12 noon.

June 23, Plentywood—Sherwood MPA Hangar's Annual Fly-In Breakfast.

July 12-14, Sun Valley, Idaho—"Western Flight Roundup." Montana, Oregon, Utah and Washington Pilots Associations Summer Fly-In.

July 27-28, Revelstoke, B. C. Canada—International Championship Stock Plane Races sponsored by the Revelstoke Flying Club. Time trials on Friday, July 26th. Elimination races Saturday on July 27th. International Championship 100 mile race on Sunday, July 28th. Accompanying air show—World's greatest spectator sport held in the world's most perfect natural amphitheatre in the Columbia Valley at Revelstoke.

August 24 & 25, Ekalaka—Billings Hangar of the MPA's Second Annual Fly-In (Watch for further details.)

FRONTIER HITS NEW PASSENGER RECORD

Passenger traffic increases of 43% in revenue passenger miles for both the month of March and for the first quarter of 1968 set a new 21 year record for Frontier Airlines.

Frontier's passengers flew an average trip of 349 miles in March compared with 293 miles a trip per passenger in March, 1967. Revenue passenger miles in March totaled 69,264,000 compared with 48,420,000 recorded for March last year.

Following are the Montana cities served by Frontier which had an increase in passenger boardings during March, 1968. They are shown with the percentage differential compared to one year ago.

CITY	1968	1967	Percent
Billings	3,145	2,703	+16
Great Falls	1,394	1,179	+18
Havre	113	92	+23
Lewistown	158	105	+50
Miles City	120	117	+3
Wolf Point	98	52	+88

If all the approximately 110,000 U. S. general aviation aircraft (non-airline civil planes) were flying at the same altitude and speed, they all could be in the air over Arizona at the same time and still have more than a square mile of airspace each in which to maneuver.

1968 STUDENT PILOT TO WIN 1969 CESSNA 150

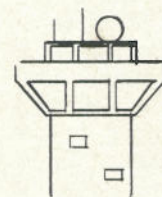
One of the 200,000 people expected to start taking flying lessons in 1968 will be selected by a computer to win a 1969 Cessna Model 150 two-place plane.

Cessna Aircraft Company has announced that the aircraft will be the grand prize award in the company's "Win-A-Plane-Sweepstakes. The contest, open to new student pilots only, will have an additional 1,000 general prize awards including 10 pilot's wristwatch chronographs and 50 aircraft band transistor radios.

Every holder of a new student pilot's license issued during 1968 will receive through the mail an individual number which will make him eligible for the awards. All Cessna dealers in the United States will be furnished with a list of the numbers and the student pilots will take his number to his local Cessna dealer and see if his number is one listed as a prize winner.

Whether a student pilot is a general award winner or not, he will have a chance on the new 150. His Cessna dealer will forward the student's number to the D. L. Blair Company in New York, the world's largest sweepstakes administrators. The winning number will be selected by a computer from the numbers mailed in by Cessna dealers.

The Contest closes at midnight on December 31, 1968 and the airplane will be presented early in January, 1969.



TOWER

OPERATIONS

MARCH, 1968

	Total Operations	Instrument Operations
Great Falls	12,832	1,411
Billings	12,046	1,585
Missoula	10,853	409
Helena	4,892	305

United Air Lines claims to be the world's largest commercial consumer of petroleum products. The airline uses about 3,796,000 gallons of fuel daily, or 44 gallons per second.

JOHN STOWE APPOINTED FAA PILOT EXAMINER

John M. Stowe, chief flight instructor for Homer-Mendel Aviation, Great Falls, was designated a Federal Aviation Administration Pilot Examiner by General Aviation District Office #9 on April 3rd, 1968.



Flight Examiner, John Stowe of Great Falls.

John has been flying over 26 years having graduated from military flight school in 1942. He served with the United States Air Force from January 1942 until September 1964.

During World War II, John served in the Southwest Pacific flying P-38s. He completed 58 combat missions and was awarded the Distinguished Flying Cross.

John served the last five years of his military service (1959-1964) at Malmstrom AFB flying C-97 tankers. He was a SAC Combat Crew Commander and Flight Commander.

For the past three years John has been employed by Holman Aviation. He attended the Montana Aeronautics Commission's Flight Instructor Refresher Course in 1966.

At the present time John holds a commercial license, single engine, multi-engine and seaplane with instrument, flight instructor, instrument ground instructor, special rating-Boeing 377 and holds the FAA Gold Seal.

John and his wife Natalie have one daughter, Judy, who is a senior at the University of Montana. They reside at 2508 - 12th Avenue South in Great Falls.

CONGRATULATIONS



FAA CERTIFICATES ISSUED RECENTLY TO MONTANA PILOTS

STUDENT

Hollar, Ronald F.—Beach, N. D.
Butler, Merlyn M.—Billings
Jeffers, William W.—Billings
Kennedy, Herbert E.—Missoula
Robinson, Francis W.—Highwood
Magnus Jr., Donald I.—Missoula
Schwarz, Harley R.—Missoula

PRIVATE

Redman, John R.—Sidney
Redman, Doris A.—Sidney
Bump, Edward R.—Sidney
Arthur, Donald G.—Lewistown
Kyle, Thomas E.—Henderson, Nev.
Larson, Donald E.—Williston, N. D.
Carson, Lee R.—Billings
Sabol, James P.—Billings
Hamilton, Donald M.—Billings
Kuehn, Curtis C.—Columbus
Noyes, Keith—Bozeman
Goodwin, William E.—Bozeman
Carroll, William J.—Billings
Gollehon, Terry G.—Brady
Caputo, Roger W.—Indianapolis, Ind.
Davis, Jr., A. D.—Great Falls
Viotor, Frederick W.—Philipsburg
Alex, John J.—Great Falls
Wirtz, LeRoy M.—Kalispell
Travis, Lloyd D.—Bozeman
Sordahl, Donald H.—Great Falls
MacNab, Duncan S.—Bozeman
Fisher, Gary A.—Helena
Fanning, Francis L.—Harlem
Robinson, Denis F.—Highwood
Talsma, Wallace J.—Thompson Falls
Roscoe, Wm. P. III—Missoula
Karr, Percy Fay—Missoula
Brutosky, Boyce A.—Sun River
Speaker, George F.—Butte
Yudsky, Leo—Great Falls
Rasmussen, Kermit E.—Harlem
Taft, Levi H.—Shelby
Nelson, Larry Lee—Shelby
Richardson, Samuel E.—Fort Peck
Windén, Harold G.—Fort Benton
Brent, Eugene W.—Helena
Gray, Kerry E.—Bellevue, Wash.
Dailey, Jr., Charles E.—Missoula

COMMERCIAL

Nish, Robert M.—Judith Gap
Lemon, James M.—Billings

Cowan, Ronald G.—Billings
Wehrman, Gerhardt M.—Billings
Shepard, Morton W.—Wilton, Maine
Buzalsky, Paul R.—Billings
Gues, Forrest L.—Great Falls
Moody, Vernon L.—Helena
Hays, Kenneth D.—Madison, S. D.

ATR

Deans Jr., George D.—Sheridan, Wyo.

INSTRUMENT

Baldwin, Florian R.—Roundup
Rismon, Ronald L.—Billings
James, Rock M.—Kodiak, Alaska
Rogers, Julian W.—Utica
Gregoire, Bernard R.—Great Falls
Stephens, Lawrence E.—Glasgow AFB

MULTI-ENGINE

Newcomb, Thomas P.—Great Falls
Mendel, Eugene L.—Malta
Briggs, John S.—Butte

FLIGHT INSTRUCTOR

Cadwell, Philip C.—Red Lodge
Smuin, Douglas K.—Missoula
Adkins, Ray N.—Missoula

FLIGHT INSTRUCTOR INSTRUMENT

Martin, Gary J.—Malta
Rismon, Ronald L.—Billings
James, Rock M.—Kodiak, Alaska

BASIC GROUND INSTRUCTOR

Wishman, Raymond—Geraldine

ADVANCED GROUND INSTRUCTOR

Cebulski, Russell D.—Malta
Weaver, Jack W.—Billings
Stevenson, Mary L.—Missoula

INSTRUMENT GROUND INSTRUCTOR

Weaver, Jack W.—Billings
Hansen, A. Lloyd—Missoula

POWERPLANT MECHANIC

Soare, Malcolm A.—Glendive
Dashnea, Lynes D.—Missoula

AIRFRAME MECHANIC

Van Meter, Robert W.—Clancy

SPECIAL TYPE RATING

Stephens, Lawrence E.—Glasgow AFB (DC-3)

SPECIAL PURPOSE

Elster, Leonard H.—Calgary
Smith, James E.—Calgary

About 75 per cent of a jet engine is used to compress air. The remaining 25 per cent propels the aircraft.

MAMA—Continued from page 1

dangers of allowing obstructions in runway approaches as well as possibilities of reflection problems to VOR's caused by metal buildings poorly located on airports.

The four scheduled Airlines in Montana; Frontier, Northwest, West Coast, and Western sponsored a cocktail hour, followed by the Annual Banquet sponsored by the Airport Parking Company of America and the Humble Oil Company. The banquet speaker was Mr. Michael Krajnak, Executive Director of the Central Montana Industrial Development Corporation of Lewistown. Mr. Krajnak was introduced by the new President for the coming year, Mr. Art Wiedeman. Next year's annual meeting will be held in conjunction with the Montana Aviation Trades Association and will be held in the Finlen Hotel in Butte on January 17 and 18, 1969. New officers of the MAMA were elected and are: Mr. Hugh R. Kelleher, Helena, Executive Secretary, replacing Robert Michael of Billings and more recently, Milwaukee, Wisconsin. The new President is Mr. Arthur Wiedeman of Lewistown, Mr. Harold Ebaugh of Havre is the new Vice-President, and the Secretary-Treasurer is Mr. O. D. Gifford of Chester. The Directors for the coming year are Mr. Art Korn of Butte, Mr. James Monger of Helena, Mr. Robert Scarborough of Billings and Mr. Ray Hall of Kalispell.

During the business session, the group unanimously approved the writing of a letter of appreciation to the past Executive Secretary, Robert Michael. Other business consisted of resolutions in opposition to the Moss Bill, along with the usual resolutions of appreciation to the Convention hosts and all exhibitors. Two exhibitors had displays for the Convention—they were the Armco Steel Building Company of Billings and Butler Buildings of Great Falls.

The next Board of Directors meeting of the MAMA will be held in Helena at 11:00 a.m. on Monday, September 23, 1968. Other pertinent resolutions will be considered at that time.

Only about 28% of airports in the U. S. have paved runways. Only 3% have control towers.



James C. Taylor, chairman of transportation committee of Bozeman Chamber of Commerce, giving his "Airport Bond" presentation.



Chester Johnson, president of Commute Air; Spokane, Washington. Chet spoke on the panel discussion "third level carrier and Montana" with Charles Lynch, MAC director and Floyd Creasman, airport director of Spokane International airport.



Noon luncheon: Shown left to right—Dick Langford, Lewistown; Ruben Coy, Missoula; afternoon speaker Harris Goodrich, Los Angeles; Art Korn, Butte; President Art Wiedeman; MAMA Director James Monger, Assistant Director Montana Aeronautics Commission and secretary treasurer, Gifford.



Incoming president Arthur Wiedeman addressing the banquet group. Shown left to right: President Wiedeman; out going president Arthur Korn, Butte; banquet speaker, Michael Krajnak; executive secretary, Hugh Kelleher, Helena and secretary-treasurer O. D. Gifford of Chester.

FAA INSPECTORS' CORNER



By LAUREN D. BASHAM
GA Operations Inspector
GADO No. 9

AIRCRAFT WEIGHT AND BALANCE

Quite often pilots tend to regard weight and balance data as information of interest only to engineers, mechanics and operators of scheduled and non-scheduled cargo-type aircraft. They reason that the aircraft was weighed during the certification process and that this weight and balance data remains valid indefinitely, as long as there are no major changes in equipment on the aircraft.

The aircraft manufacturer does, in fact, furnish weight and balance data and an equipment list with each aircraft as it comes from the production line. This weight and balance data sheet contains the weight and ECG location of a specific aircraft and the items of equipment that are installed as it leaves the factory. However, the factory equipment list may have been altered by the distributor or dealer prior to the time the aircraft reaches its ultimate owner. This results in a changed weight and CG location from that given in the original aircraft papers. When such an alteration has occurred, a new weight and balance data will normally have been computed, the records revised and either an FAA Form 337 describing the alteration or an aircraft log book entry will have been made as appropriate.

The responsibility to determine that the weight and balance computation for a given airplane fall within the prescribed operating limits must then rest with the pilot and/or operator. The pilot who flies the aircraft is responsible for the actual loading of the aircraft. He must determine that all the variables that make up the useful load, that is—fuel, oil, pilot, passengers and baggage are not in excess of that allowed and are distributed properly. Even though the gross weight may not be exceeded, the CG position can quite often fall outside of the approved limits and drastically affect the normal stability

characteristics of the airplane. The pilot must be aware that any seat or baggage area capacity can be exceeded in relation to a specific loading and he should adhere in general to the prescribed loading schedule shown in the aircraft owner's handbook.

The inherent safety of an airplane is directly affected by its weight and balance simply because the airplane is designed for specific weight limits and balance conditions. The stability of an airplane may be completely unsatisfactory if the gross weight is exceeded and the distribution of weight in an aircraft has a direct effect on stability.

The aircraft will become less controllable, especially at reduced speeds, as the center of gravity moves rearward. The greater the load dispersal, the longer the moment arms of weight and consequently the controls become less responsive. This accounts for some of the "hunting" and altitude variations in a turbulent air mass.

The pilot should be aware of still other effects of excess load or improper CG location. The cruise performance of an aircraft is radically affected by excess load. The angle of attack must be increased to provide more lift, more power is required to overcome increased drag. Additional power requires more fuel, in turn reducing the range of the aircraft.

Normally an aircraft has a load limit factor of 3.8 "G's". This means that the aircraft structure can normally support 3.8 times the weight of the aircraft at normal gross weight. When this weight is exceeded, the 'overload' has the effect of decreasing the "G" load capability of the aircraft and could easily result in structural distortion or failure.

Last, but not least, a rearward CG location can **reduce the stalling speed** of an aircraft and **induce control** problems beyond the pilot's capability. If all pilots would thoroughly familiarize themselves with the problem of weight and balance and CG location in airplanes, we would no longer have to write: "Primary cause of accident—airplane center of gravity out of limits rearward—due to overload in baggage compartment, resulting in an unstable aircraft—pilot lost control of aircraft on take-off."

FAAP for FY 1969 ANNOUNCED BY FAA

Allocations of \$74.7 million for the construction and improvement of 397 public civil airports under the Federal-aid Airport Program (FAAP) for Fiscal Year 1969 were announced by the Federal Aviation Administration of the Department of Transportation.

These allocations provide \$67.7 million to improve 356 existing airports and \$7 million to construct 41 new public airports.

Allocations were based on \$70 million appropriated by Congress for airport aid during the 1969 fiscal year, and carryover funds from previous years. Federal funds will match those provided by local communities, generally on a 50-50 basis.

FAA developed the FY 1969 Program from a record 773 requests for aid by public agencies totaling over \$392 million.

MONTANA

Location: Billings. **Sponsor:** City of Billings. **Name of Airport:** Logan Field. **Federal Funds:** \$261,039. **Description of Work:** Strengthen taxiway segment and overlay edges of Runway 16-34 2700' x 150' and improve drainage; strengthen west taxiway; strengthen taxiway segment of Runway 4-22 approx. 1000' x 150' including feathering; reconstruct central taxiway; construct apron and apron pad.

Location: Helena. **Sponsor:** City of Helena, and Lewis and Clark County. **Name of Airport:** Helena. **Federal Funds:** \$570,860. **Description of Work:** Land—airport development, east clear zone and roadway right-of-way; construct and light exit taxiway; extend, light (medium intensity) and mark 8-26 runway from 7000' to 8100' x 150'; construct and light east parallel taxiway; overlay existing Runway 8-26 7000' x 150', west taxiway, east taxiway and apron; relocate county road.

Location: Kalispell. **Sponsor:** City of Kalispell and Flathead County. **Name of Airport:** Flathead County. **Federal Funds:** \$241,185. **Description of Work:** Land—airport development and clear zone Runway 1; overlay existing Runway 1-19 5578' x 150', connecting taxiway and portion of apron; reconstruct portion of apron; extend, light (high intensity) and mark runway 1-19 from 5578' to

7000' x 150'; expand apron.

Location: Missoula. **Sponsor:** Missoula County Airport Commission. **Name of Airport:** Missoula County. **Federal Funds:** \$657,312. **Description of Work:** Land—airport development and NW/ SE clear zones; overlay and mark Runway 11-29 7046' x 150', including relocation of high intensity lights; reconstruct apron; overlay N/S portion of Taxiway B; prepare site for 2454' extension on Runway 11-29; relocate FAA transmitter site.

Location: Philipsburg. **Sponsor:** Montana Aeronautics Commission. **Name of Airport:** Philipsburg. **Federal Funds:** \$61,512. **Description of Work:** Land — airport development and clear zones; construct N/S runway 3600' x 60', taxiway and apron; relocate utilities.

TOTAL—\$1,791,908.

CAB APPROVES AIRLINES' MERGER

The Civil Aeronautics Board in Washington announced its approval of the merger of Bonanza Air Lines, Pacific Air Lines and West Coast Airlines. The new company formed by the merger will be called "Air West".

Air West's route system will extend through the entire west, serving the eight states of Montana, Idaho, Washington, Oregon, California, Nevada, Utah and Arizona and will extend from Calgary, Canada to Guaymas, La Paz, Mazatlan and Puerto Vallarta in the Republic of Mexico.

Air West is expected to be the largest regional airline in the country

and will tie together virtually every major resort, commercial and industrial city in the West. It will serve 100 cities through 80 airports. The eight states to be served comprise 28% of the contiguous land area in the U. S. and contain a population of over 28 million people.

According to the chief executive of the three carriers, the merger will permit unlimited and unparalleled opportunities for development of the west by the new company.

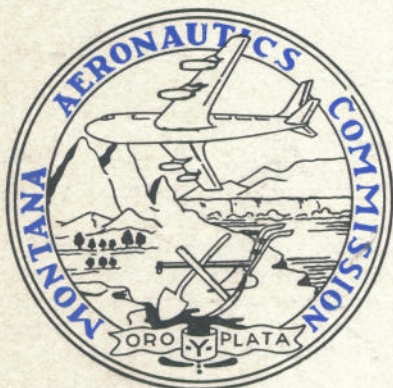
Mr. Nick Bez is chairman of the board and chief executive officer of Air West; Edmund Converse, vice chairman; David Grace, Chairman of the executive committee and G. Robert Henry, president. Air West headquarters will be in San Francisco.

MEMBER

NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in **research, development, and advancement of aviation**; to develop uniform laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

P. O. Box 1698
Helena, Montana 59601
Return Postage Guaranteed



MAY, 1968

BULK RATE
U. S. POSTAGE
PAID
HELENA, MONTANA
Permit No. 2